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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,546	12/05/2003	Carol J. Buck	3607-106.4 US	8795

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EXAMINER	
YU, GINA C	

ART UNIT	PAPER NUMBER
1617	

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/728,546	BUCK, CAROL J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gina C. Yu	1617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23,24,28-33,45-47 and 50-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23,24,28-33,45-47 and 50-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Receipt is acknowledged of amendment filed on April 30, 2007. Claims 23, 24, 28-33, 45-47, 50-56 are pending. Claim rejections made under 35 U.S.C. § 112, second paragraph, as indicated in the previous Office action dated March 15, 2007, are withdrawn in view of the claim amendment made by applicants. New rejections are made in view of the claim amendment in part, and in view of further consideration in part.

The indicated allowability of claims 26, 27, 48, 49 is withdrawn in view of the newly discovered reference(s) to Olsen et al. (US 5856451) and Funda (2006/0099301 A1). Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 23, 28, 30-33, 45-47, and 50, 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 5002761) ("Mueller") in view of Olsen et al. (US 5856451).**

Mueller teaches hair treatment composition comprising up to 20 wt % of an inorganic and/or an organic acid. See col. 2, lines 23 – 42; instant claims 30 and 52. Acetic acid is taught. See col. 2, lines 52-66; instant claims 32, 54, and 55. The operating examples show compositions comprising about 90.4-95 wt % of water. See

Art Unit: 1617

instant claims 30 and 52. Perfumes are added in the compositions. See col. 4, lines 20 – 28; instant claims 31 and 53. The reference teaches that the prior art compositions are in the form of cream. See col. 3, lines 36 – col. 4, line 2; instant claims 33 and 56. The reference teaches that the treatment provides the wet and dry combability and reduces the electrostatic chargeability of the hair. The preambles of instant claims 23, 33, 45, and 56 are not given patentable weight, as discussed above. The reference teaches adding thickeners, which act as 'gelling agent' of the instant claims. See col. 3, line 48 – col. 4, line 2.

Mueller fails to teach the enzymes of the instant claims.

Olsen teaches the use of modified polypeptides which reduces allergenicity in hair care compositions. The reference teaches that the invention benefits the end-users cosmetic and toilet products such as hairdressers. See col. 1, lines 21 – 30.

Endoprotease of subtilisin Carlsberg is taught. See col. 7, lines 1 – 34. The specific application in hair treatment compositions such as shampoo, conditioners, waving compositions, tonic, cream, etc. are also taught in col. 30, lines 11 – 19.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the Mueller composition by incorporating the modified polypeptides and enzymes of Olsen, as motivated by the latter, because the reference teaches that enzymes are useful in reducing allergenicity of hair treatment compositions. The skilled artisan would have had a reasonable expectation of successfully producing hypoallergenic hair treatment compositions.

**Claims 23, 24, 28-33, 45-47, and 50-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 5002761) ("Mueller") in view of Funda (US 2006/0099301 A1).**

Mueller is relied upon as discussed above. The reference fails to teach the enzymes of the instant claims.

Funda teaches adding to hair care compositions, an aqueous solution or suspension of modified lupin protein obtained from exo-protease, endo-protease, or the mixture thereof. See [0007]. Alacalse and Flavourzyme (protease from *Aspergillus oryzae*) are particularly mentioned. The reference teaches that the proteins are added together with fat-soluble colorant and/or add enrichment or fortification for cosmetics. Paragraph [0053] mentions applications of the proteins in cream, gel, shampoos, conditioners, sprays or gels wherein the compositions are used as a colorant or active ingredients. The reference further teaches that stable emulsions or dispersions formed. See [0054].

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the hair compositions of Mueller by incorporating the modified lupin proteins obtained from the enzymes as motivated by Funda because the latter teaches that the proteins are added together with fat-soluble colorant and/or add enrichment or fortification for cosmetics. The skilled artisan would have had a reasonable expectation of successfully producing a stable emulsion comprising fat-soluble actives such as colorants and/or perfumes.

***Double Patenting***

Art Unit: 1617

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 23, 24, 28-33, 45-47, and 50-56 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,517,822 B1 in view of in view of Shiseido and Hui.**

Claim 1 of the '822 patent is directed to a composition consisting essentially of about 8-30 % by weight of at least one alkanolic acid, an acceptable diluent, and less than about 30 % of at least one auxiliary component selected from a fragrance, an odor masker, conditioner, gelling agent and penetration enhancer. See instant claims 23, 24, 30-33, 45, 46, 52-56.

The '822 does not disclose using enzyme in the composition, however, claim 1 is open to include a conditioner, and claims 2 and 3 of the patent further include at least one more auxiliary component.

Art Unit: 1617

Funda teaches adding to hair care compositions, an aqueous solution or suspension of modified lupin protein obtained from exo-protease, endo-protease, or the mixture thereof. See [0007]. Alacalse and Flavourzyme (protease from *Aspergillus oryzae*) are particularly mentioned. The reference teaches that the proteins are added together with fat-soluble colorant and/or add enrichment or fortification for cosmetics. Paragraph [0053] mentions applications of the proteins in cream, gel, shampoos, conditioners, sprays or gels wherein the compositions are used as a colorant or active ingredients. The reference further teaches that stable emulsions or dispersions formed. See [0054].

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the hair compositions of '822 patent by incorporating the modified lupin proteins obtained from the enzymes as motivated by Funda because the latter teaches that the proteins are added together with fat-soluble colorant and/or add enrichment or fortification for cosmetics. The skilled artisan would have had a reasonable expectation of successfully producing a stable emulsion comprising fat-soluble actives such as colorants and/or perfumes.

### ***Response to Arguments***

Applicant's arguments filed on April 30, 2007 have been fully considered but they are moot in view of the new grounds of rejection.

### ***Conclusion***

No claims are allowed.

Art Unit: 1617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 571-272-8605. The examiner can normally be reached on Monday through Friday, from 8:00AM until 5:30 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gina C. Yu  
Patent Examiner